

What is Claimed is:

1. A tooth whitening compound for whitening a tooth surface, comprising:

a whitening agent comprising a poloxamer, a hydrogen peroxide, a glycerin, a dicalcium phosphate dehydrate, a phosphoric acid, and Food, Drug & Cosmetic (FD&C) Green No.3 mixing together with a predetermined amount of water to form a whitening gel for applying on said tooth surface to process a teeth whitening reaction between said whitening agent and said tooth surface; and

a whitening catalyst having a predetermined amount of amino acids mixing with said whitening agent to chemically react with said hydrogen peroxide for stabilizing said teeth whitening reaction.

2. The tooth whitening compound, as recited in claim 1, wherein 0.1 to 1% by weight of said whitening catalyst is mixed with said whitening agent.

3. The tooth whitening compound, as recited in claim 1, wherein said whitening catalyst is mulberry root extract.

4. The tooth whitening compound, as recited in claim 2, wherein said whitening catalyst is mulberry root extract.

5. The tooth whitening compound, as recited in claim 3, wherein said whitening catalyst is manufactured through a process which comprises the steps of:

(a) preparing a predetermined amount of natural mulberry roots;

(b) soaking said natural mulberry roots in water for a predetermined period of time to form a mulberry roots extract solution; and

(c) extracting said mulberry roots extract solution to form said mulberry root extract by:

(c.1) filtering said mulberry roots from said mulberry roots extract solution;

(c.2) evaporating said water from said mulberry roots extract solution to form a saturated mulberry roots solution; and

(c.3) crystallizing said saturated mulberry roots solution to form said mulberry roots extract.

5           6. The tooth whitening compound, as recited in claim 4, wherein said whitening catalyst is manufactured through a process which comprises the steps of:

(a) preparing a predetermined amount of natural mulberry roots;

(b) soaking said natural mulberry roots in water for a predetermined period of time to form a mulberry roots extract solution; and

10           (c) extracting said mulberry roots extract solution to form said mulberry root extract by:

(c.1) filtering said mulberry roots from said mulberry roots extract solution;

(c.2) evaporating said water from said mulberry roots extract solution to form a saturated mulberry roots solution; and

15           (c.3) crystallizing said saturated mulberry roots solution to form said mulberry roots extract.

7. The tooth whitening compound, as recited in claim 4, is manufactured through a process which comprises the steps of:

20           (A) mixing a predetermined amount of said phosphoric acid with said water to form a phosphoric acid solution;

(B) mixing a predetermined amount of said poloxamer with said phosphoric acid solution to form a mixture with free of lumps;

(C) mixing a predetermined amount of said glycerin, said dicalcium phosphate dehydrate, said hydrogen peroxides, and said Food, Drug & Cosmetic (FD&C) Green No.3 with said mixture to form said whitening agent; and

5 (D) mixing said mulberry roots extract with said whitening agent to form said tooth whitening compound.

8. The tooth whitening compound, as recited in claim 6, is manufactured through a process which comprises the steps of:

(A) mixing a predetermined amount of said phosphoric acid with said water to form a phosphoric acid solution;

10 (B) mixing a predetermined amount of said poloxamer with said phosphoric acid solution to form a mixture with free of lumps;

(C) mixing a predetermined amount of said glycerin, said dicalcium phosphate dehydrate, said hydrogen peroxides, and said Food, Drug & Cosmetic (FD&C) Green No.3 with said mixture to form said whitening agent; and

15 (D) mixing said mulberry roots extract with said whitening agent to form said tooth whitening compound.

9. The tooth whitening compound, as recited in claim 2, wherein 10 to 30% by weight of said poloxamer, 3 to 6% by weight of said hydrogen peroxide, 7 to 10% by weight of said glycerin, 1 to 2% by weight of said dicalcium phosphate dehydrate, 1 to 2% by weight of said phosphoric acid, 0.1 to 1% by weight of said Food, Drug & Cosmetic Green No. 3, and 50 to 70% by weight of said water are mixed to form said whitening agent.

10. The tooth whitening compound, as recited in claim 4, wherein 10 to 30% by weight of said poloxamer, 3 to 6% by weight of said hydrogen peroxide, 7 to 10% by weight of said glycerin, 1 to 2% by weight of said dicalcium phosphate dehydrate, 1 to 2% by weight of said phosphoric acid, 0.1 to 1% by weight of said Food, Drug & Cosmetic Green No. 3, and 50 to 70% by weight of said water are mixed to form said whitening agent.

11. The tooth whitening compound, as recited in claim 8, wherein 10 to 30% by weight of said poloxamer, 3 to 6% by weight of said hydrogen peroxide, 7 to 10% by weight of said glycerin, 1 to 2% by weight of said dicalcium phosphate dehydrate, 1 to 2% by weight of said phosphoric acid, 0.1 to 1% by weight of said Food, Drug & Cosmetic Green No. 3, and 50 to 70% by weight of said water are mixed to form said whitening agent.

12. A tooth whitening compound for whitening a tooth surface, comprising:

a whitening agent comprising an ultrapeg, a carbamide peroxide, a glycerin natural kosher, a dicalcium phosphate dihydrate, a carbopol, a phosphoric acid, and a sucralose mixing together with a predetermined mount of water to form a whitening gel for applying on said tooth surface to process a teeth whitening reaction between said whitening agent and said tooth surface; and

a whitening catalyst having a predetermined amount of amino acids mixing with said whitening agent to chemically react with said carbamide peroxide for stabilizing said teeth whitening reaction.

13. The tooth whitening compound, as recited in claim 12, wherein 0.1 to 1% by weight of said whitening catalyst is mixed with said whitening agent.

14. The tooth whitening compound, as recited in claim 12, wherein said whitening catalyst is mulberry root extract.

15. The tooth whitening compound, as recited in claim 13, wherein said whitening catalyst is mulberry root extract.

16. The tooth whitening compound, as recited in claim 14, wherein said whitening catalyst is manufactured through a process which comprises the steps of:

(a) preparing a predetermined amount of natural mulberry roots;

(b) soaking said natural mulberry roots in water for a predetermined period of time to form a mulberry roots extract solution; and

(c) extracting said mulberry roots extract solution to form said mulberry root extract by:

(c.1) filtering said mulberry roots from said mulberry roots extract solution;

5 (c.2) evaporating said water from said mulberry roots extract solution to form a saturated mulberry roots solution; and

(c.3) crystallizing said saturated mulberry roots solution to form said mulberry roots extract.

17. The tooth whitening compound, as recited in claim 15, wherein said whitening catalyst is manufactured through a process which comprises the steps of:

10 (a) preparing a predetermined amount of natural mulberry roots;

(b) soaking said natural mulberry roots in water for a predetermined period of time to form a mulberry roots extract solution; and

(c) extracting said mulberry roots extract solution to form said mulberry root extract by:

15 (c.1) filtering said mulberry roots from said mulberry roots extract solution;

(c.2) evaporating said water from said mulberry roots extract solution to form a saturated mulberry roots solution; and

(c.3) crystallizing said saturated mulberry roots solution to form said mulberry roots extract.

20 18. The tooth whitening compound, as recited in claim 15, is manufactured through a process which comprises the steps of:

(A) mixing a predetermined amount of said phosphoric acid with said water to form a phosphoric acid solution;

(B) mixing a predetermined amount of said carbopol with said phosphoric acid solution to form a mixture with free of lumps;

(C) heating up a predetermined amount of said ultrapeg mixed in said mixture until said ultrapeg is substantially dissolved in said mixture to form an ultrapeg based mixture;

(D) mixing a predetermined amount of said glycerin natural kosher, said dicalcium phosphate dehydrate, said carbamide peroxides, and said suralose with said ultrapeg based mixture to form said whitening agent; and

(E) mixing said mulberry roots extract with said whitening agent to form said tooth whitening compound.

19. The tooth whitening compound, as recited in claim 17, is manufactured through a process which comprises the steps of:

(A) mixing a predetermined amount of said phosphoric acid with said water to form a phosphoric acid solution;

(B) mixing a predetermined amount of said carbopol with said phosphoric acid solution to form a mixture with free of lumps;

(C) heating up a predetermined amount of said ultrapeg mixed in said mixture until said ultrapeg is substantially dissolved in said mixture to form an ultrapeg based mixture;

(D) mixing a predetermined amount of said glycerin natural kosher, said dicalcium phosphate dehydrate, said carbamide peroxides, and said suralose with said ultrapeg based mixture to form said whitening agent; and

(E) mixing said mulberry roots extract with said whitening agent to form said tooth whitening compound.

20. The tooth whitening compound, as recited in claim 13, wherein 20 to 30% by weight of said ultrapeg, 8 to 22% by weight of said carbamide peroxide, 10 to 20% by

weight of said glycerin natural kosher, 1 to 5% by weight of said dicalcium phosphate dehydrate, 10 to 30% by weight of said carbopol, 0.1 to 1 % of said phosphoric acid, 0.1% by weight of said sucralose, and 20 to 50% by weight of said water are mixed to form said whitening agent.

5           21. The tooth whitening compound, as recited in claim 15, wherein 20 to 30% by weight of said ultrapeg, 8 to 22% by weight of said carbamide peroxide, 10 to 20% by weight of said glycerin natural kosher, 1 to 5% by weight of said dicalcium phosphate dehydrate, 10 to 30% by weight of said carbopol, 0.1 to 1 % of said phosphoric acid, 0.1% by weight of said sucralose, and 20 to 50% by weight of said water are mixed to  
10 form said whitening agent.

          22. The tooth whitening compound, as recited in claim 19, wherein 20 to 30% by weight of said ultrapeg, 8 to 22% by weight of said carbamide peroxide, 10 to 20% by weight of said glycerin natural kosher, 1 to 5% by weight of said dicalcium phosphate dehydrate, 10 to 30% by weight of said carbopol, 0.1 to 1 % of said phosphoric acid,  
15 0.1% by weight of said sucralose, and 20 to 50% by weight of said water are mixed to form said whitening agent.

          23. A process for manufacturing a mulberry root extract as a whitening catalyst of a tooth whitening compound, comprising the steps of:

- (a) preparing a predetermined amount of natural mulberry roots;
- 20           (b) soaking said natural mulberry roots in water for a predetermined period of time to form a mulberry roots extract solution; and
- (c) extracting said mulberry roots extract solution to form said mulberry root extract.

          24. The process, as recited in claim 23, wherein the step (c) further comprises  
25 the sub-steps of:

- (c.1) filtering said mulberry roots from said mulberry roots extract solution;

(c.2) evaporating said water from said mulberry roots extract solution to form a saturated mulberry roots solution; and

(c.3) crystallizing said saturated mulberry roots solution to form said mulberry roots extract.